REMARKS

This application has been carefully reviewed in light of the final Office Action dated June 24, 2009. Claims 25 to 28 are in the application, with Claims 1 to 6, 8 to 17 and 19 to 21 having been cancelled without prejudice or disclaimer of subject matter and without conceding the correctness of the rejections applied against them. Claims 25 and 27 are the independent claims. Reconsideration and further examination are respectfully requested.

Claims 1 to 6, 8 to 10, 12 to 17, 19 and 21 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,032,147 (Williams) and U.S. Patent No. 6,490,597 (Singh). Claims 11 and 20 were rejected under § 103(a) over Williams, Singh and U.S. Patent No. 5,884,014 (Huttenlocher). Without conceding the correctness of these rejections, Claims 1 to 6, 8 to 11, 12 to 17, and 19 to 21 have been canceled without prejudice or disclaimer of subject matter. New Claims 25 to 28 are believed to be allowable over the applied art of record for at least the following reasons.

Independent Claims 25 and 27 generally concern managing data in multiple formats. An original is scanned, and a first image data is generated in a first data format which is a RAW format. A single page management record is generated for managing the first image data. In addition, second image data is generated from the first image data, in a second data format other than the RAW data format.

According to one aspect of Claims 25 and 27, the single page management record manages the first image data in association with the second image data generated from the first image data.

By virtue of this feature, it is ordinarily possible to reduce the memory required for page management records, as a single page management record manages a plurality of formats derived from the same original.

According to another aspect of Claims 25 and 27, the page management record is deleted in a case that (a) a delete request of the page management record is received from at least one of a first data processing unit or a second data processing unit and (b) neither of the first data processing unit or the second data processing unit is referring to the page management record.

By virtue of this feature, it is ordinarily possible to avoid a situation in which the page management record is deleted just after creation of the page management record, but before the first the first and second data processing units start referring to the page management record. Specifically, the page management record is not deleted until a delete request is received from one of the processing units.

Referring specifically to claim language, independent Claim 25 is directed to a data processing apparatus. The apparatus includes a scanner processing unit constructed to optically scan an original and generate a first image data in a first data format which is a RAW format. The apparatus also includes a memory management unit constructed to generate a single page management record for managing the first image data. The memory management unit generates the single page management record responsive to a request made by the scanner processing unit when scanning the original. In addition, the apparatus includes an encoding unit constructed to generate a second image data from the first image data, in a second data format other than the RAW format. The apparatus further includes a first data processing unit constructed to execute a first predetermined processing

using the first image data in the RAW format. The apparatus also includes a second data processing unit constructed to execute a second predetermined processing using the second image data in the second format. The memory management unit causes the page management record to manage the second image data in association with the first image data. The memory management unit deletes the page management record in a case that (a) a delete request of the page management record is received from at least one of the first data processing unit or the second data processing unit and (b) neither of the first data processing unit or the second data processing unit is referring to the page management record.

Independent Claim 27 is directed to a method substantially in accordance with the apparatus of Claim 25.

The art of record is not seen to disclose or suggest the features of Claims 25 and 27, and in particular is not seen to disclose or suggest at least the features of (i) causing a single page data management record to manage first image data in a RAW format in association with second image data generated from the first image data in a second format, and (ii) deleting the page data management record in a case that (a) a delete request of the page management record is received from at least one of a first data processing unit or a second data processing unit and (b) neither of the first data processing unit or the second data processing unit is referring to the page management record.

As understood by Applicants, Williams is directed to a conversion engine which converts input records into a universal format. Depending on the output device, the record may be converted into an output specific format. See Williams, Abstract.

Page 4 of the Office Action, in its rejection of now-cancelled Claim 1, asserts that Williams (Column 2, lines 48 to 51 and Column 3, lines 30 to 56) discloses generating data of a second encoding format from data of a first encoding format, and causing a page data management record to manage second encoding information indicating the second encoding format with first encoding information indicating the first encoding format.

However, the cited portions of Williams simply disclose converting differently-formatted data records from respectively different devices into a universal format. See Williams, Column 2, lines 48 to 51 and Column 3, lines 30 to 56. Williams is not seen to disclose or suggest causing a page management record to manage a plurality of formats derived from the same original, much less causing a single page data management record to manage first image data in a RAW format in association with second image data generated from the first image data in a second format.

Pages 4 and 5 of the Office Action concede that Williams does not disclose deleting a page data management record if none of a plurality of output processors refer to the page data management record. Applicants agree, and submit that it logically follows that Williams also does not disclose deleting the page data management record in a case that (a) a delete request of the page management record is received from at least one of a first data processing unit or a second data processing unit and (b) neither of the first data processing unit or the second data processing unit is referring to the page management record.

Singh is not seen to remedy the deficiencies of Williams. As understood by Applicants, Singh is directed to maintaining data objects in memory. Metrics for freshness

and interestingness of a data object are defined based on the last date on which the data object was valid or used. Outdated objects are candidates for removal from the system. See Singh, Abstract.

However, Singh is not seen to disclose or suggest causing a page management record to manage a plurality of formats at all, much less causing a single page data management record to manage first image data in a RAW format in association with second image data generated from the first image data in a second format.

Page 5 of the Office Action, in its rejection of now-cancelled Claim 1, asserts that Singh (Abstract) discloses deleting a page data management record if none of a plurality of output processors refer to the page data management record.

Nevertheless, Singh is not seen to disclose or suggest deleting a page management record in accordance with a delete request issued by a first or second processing unit, much less deleting the page data management record in a case that (a) a delete request of the page management record is received from at least one of a first data processing unit or a second data processing unit and (b) neither of the first data processing unit or the second data processing unit is referring to the page management record.

Therefore, independent Claims 25 and 27 are believed to be allowable over the art of record, and such action is respectfully requested.

The other claims in the application are each dependent from the independent claims and are believed to be allowable over the art of record for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the claims, however, the individual consideration of each on its own merits is respectfully requested.

Turning to a formal matter, an Information Disclosure Statement accompanies this paper, to cite art mentioned in a Notice Of Allowance in related U.S. Application No. 10/536,874. U.S. Application No. 10/536,874 was itself cited in the Information Disclosure Statement dated August 10, 2005 in the present application. In addition, U.S. Application No. 10/536,874 published as U.S. Publication No. 2006/0149835, which was cited in the Information Disclosure Statement dated January 4, 2007 in the present application. Consideration of the art cited in the accompanying Information Disclosure Statement is respectfully requested.

No other matters being raised, the entire application is believed to be in condition for allowance, and such action is courteously solicited.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

/Michael J. Guzniczak/
Michael J. Guzniczak
Attorney for Applicants
Registration No.: 59,820

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-2200
Facsimile: (212) 218-2200

FCHS_WS 3882364v1

- 10 -